

ARTICLE 19 AMENDMENT

CLAIMS

1. (Amended) A base station apparatus comprising:

a multiplexer that, when retransmission is requested from a communicating party, multiplexes retransmission packet data requested for retransmission and new transmission packet data not requested for retransmission;

a storage that temporarily stores the retransmission packet data and the new transmission packet data multiplexed in the multiplexer;

a data amount controller that stores receivable data amount information that associates reception quality information of the communicating party contained in a received signal with a receivable data amount in the communicating party and that is shared with the communicating party, detects the receivable data amount by referring to the receivable data amount information using the reception quality information, and adjusts an amount of multiplexing data between the retransmission packet data and the new transmission packet data in the multiplexer so that the amount of the retransmission packet data and the new

transmission packet data stored in the storage is less than or equal to the receivable data amount detected; and

a transmitter that transmits the new transmission packet data and the retransmission packet data stored in the storage to the communicating party.

2. (Amended) A base station apparatus comprising:

a multiplexer that, when retransmission is requested from a communicating party, multiplexes retransmission packet data requested for retransmission and new transmission packet data not requested for retransmission;

a storage that temporarily stores the retransmission packet data and the new transmission packet data multiplexed in the multiplexer;

a data amount controller that stores transmission data rate information that associates reception quality information of the communicating party contained in a received signal with a receivable transmission data rate in the communicating party and that is shared with the communicating party, detects the transmission data rate by referring to the transmission data rate information using the reception quality information, calculates queuing delay time in the storage from the transmission data rate detected and the amount of the retransmission packet data and the new

transmission packet data stored in the storage, and adjusts an amount of multiplexing data between the retransmission packet data and the new transmission packet data in the multiplexer so that the amount of the retransmission packet data and the new transmission packet data stored in the storage is less than a predetermined threshold value; and

a transmitter that transmits the new transmission packet data and the retransmission packet data stored in the storage to the communicating party.

3. (Amended) The base station apparatus according to claim 2, wherein the threshold is set at a value smaller than retransmission request transmission time elapsed between the time the communicating party requests the retransmission and the time the communicating party requests again the retransmission when the retransmission packet data requested for retransmission is not received.

4. (Amended) A transmission method comprising:

multiplexing retransmission packet data requested for retransmission and new transmission packet data not requested for retransmission when retransmission is requested from a communicating party;

storing temporarily the retransmission packet data and the new transmission packet data multiplexed in a buffer; storing receivable data amount information that associates reception quality information of the communicating party contained in a received signal with a receivable data amount in the communicating party and that is shared with the communicating party, detecting the receivable data amount by referring to the receivable data amount information using the reception quality information, adjusting an amount of multiplexing data between the retransmission packet data and the new transmission packet data so that the amount the retransmission packet data and the new transmission packet data in the buffer is less than or equal to the receivable data amount detected; and

transmitting the new transmission packet data and the retransmission packet data stored in the buffer to the communicating party.

5. (Amended) A transmission method comprising:

multiplexing retransmission packet data requested for retransmission and new transmission packet data not requested for retransmission when retransmission is requested from a communicating party;

storing temporarily the retransmission packet data and the new transmission packet data multiplexed in a buffer;

storing transmission data rate information that associates reception quality information of the communicating party contained in a received signal with a receivable transmission data rate in the communicating party and that is shared with the communicating party, detecting the transmission data rate by referring to the transmission data rate information using the reception quality information, calculating queuing delay time in the buffer from the transmission data rate detected and the amount of the retransmission packet data and the new transmission packet data stored in the buffer, and adjusting an amount of multiplexing data between the retransmission packet data and the new transmission packet data so that the queuing delay time is less than or equal to a predetermined threshold; and transmitting the new transmission packet data and the retransmission packet data stored in the buffer to the communicating party.

6. (Amended) A program for executing the process of: multiplexing retransmission packet data requested for retransmission and new transmission packet data not

requested for retransmission when retransmission is requested from a communicating party;

storing temporarily the retransmission packet data and the new transmission packet data multiplexed in a buffer;

storing receivable data amount information that associates reception quality information of the communicating party contained in a received signal with a receivable data amount in the communicating party and that is shared with the communicating party, detecting the receivable data amount by referring to the receivable data amount information using the reception quality information, and adjusting an amount of multiplexing data between the retransmission packet data and the new transmission packet data so that the amount of the retransmission packet data and the new transmission packet data stored in the buffer is less than or equal to the receivable data amount detected; and

transmitting the new transmission packet data and the retransmission packet data stored in the buffer to the communicating party.

7. (Amended) A program for executing the process of: multiplexing retransmission packet data requested for retransmission and new transmission packet data not

requested for retransmission when retransmission is requested from a communicating party storing temporarily the retransmission packet data and the new transmission packet data multiplexed in a buffer;

storing transmission data rate information that associates reception quality information of the communicating party contained in a received signal with a receivable transmission data rate in the communicating party and that is shared with the communicating party, detecting the transmission data rate by referring to the transmission data rate information using the reception quality information, calculating queuing delay time in the buffer from the transmission data rate detected and a amount of data stored of the retransmission packet data and the new transmission packet data in the buffer, and adjusting an amount of multiplexing data between the retransmission packet data and the new transmission packet data so that the queuing delay time is less than or equal to a predetermined threshold; and

transmitting the new transmission packet data and the retransmission packet data stored in the buffer to the communicating party.